

IN THE SPECIFICATION:

Please amend the abstract as follows:

ABSTRACT

[0027] Disclosed is a method for forming an optical mask that has reduced processing steps. The invention performs a first patterning of an opaque chrome layer to expose a first region of the transparent quartz substrate and then etches the first region of the transparent quartz substrate through the chrome layer to create a phase shift region within the transparent quartz substrate. Next, the invention performs additional patterning of the opaque chrome layer to expose a second region of the transparent quartz substrate that is adjacent to the first region. This additional patterning process enlarges the opening formed in the opaque mask formed in the first patterning process. The first region and the second region comprise a continuous area of the transparent quartz substrate.

Please amend paragraphs 0006, 0007, 0019, and 0023 as follows:

[0006] The process here is beneficial because it eliminates levels of processing, as well as reduces the complexity of processing. The fact that less lithography levels are required immediately reduces the number of design levels (design complexity, data volume, etc.). Reduction in lithography levels also reduces the process complexity, and length (i.e., better yields, and turn around time (TAT)). With the invention, the overlay requirements for each level also become less stringent, which improves yield, and TAT.

[0007] These, and other, aspects and objects of the present invention will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following description, while indicating preferred embodiments of the present invention and numerous specific details thereof, is given by way of illustration and not by way of limitation. Many changes and modifications may be made within the scope of the present invention without departing from the spirit thereof, and the invention includes all such modifications.

[0019] In FIGS. 2A-2B, which again are top and cross-sectional views (drawn along line X-X'), a mask 104 is patterned to protect one of the openings 100. The other opening 102 is then etched to create a recess in the transparent substrate 110. The mask is subsequently removed, as shown in FIGS. 3A-3B, and the separating portion of opaque material 106 is also removed (using a number of different methods such as additional masking and etching, etc.). This produces a larger opening (openings 100, 102 combined) that has a phase shift feature where light passing through portion 100 ~~the~~ is shifted 180 degrees from the light passing through portion 102.

[0023] FIG. 8 shows the processing of the invention in flowchart form. More particularly, in item 800, the invention performs a first patterning of the opaque chrome layer to expose a first region of the transparent quartz substrate. In item 802, the invention etches the first region of the transparent quartz substrate through the chrome layer to create a

phase shift region within the transparent quartz substrate. Next, the invention performs additional patterning of the opaque chrome layer to expose a second region of the transparent quartz substrate that is adjacent the first region 804. This additional patterning process enlarges the opening formed in the first patterning process. The processing here is beneficial for a number of different reasons. In one example, the invention eliminates various levels of processing, and reduces the complexity of that processing. The fact that less lithographic levels are required immediately reduces the number of design levels (design complexity, data volume, etc.). Reduction in lithographic processing levels also reduces the process complexity, and length (i.e., yield, TAT, capacity, defects, raw process time (RPT)). With the invention, the overlay requirements for each level also become less stringent, which improves yield, and TAT.